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TRI-CITY LANDFILL

QUESTIONS AND ANSWERS

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WHAT IS THE HISTORY OF THE TRI-CITY LANDFILL?

Tri-City is a solid waste landfill owned and operated by the Salt River Pima-Maricopa Indian Community since 1973. The landfill accepts waste from the cities of Mesa and Scottsdale and formerly served Tempe.

Because Tri-City is in the floodplain of the Salt River, heavy flows in the river encroach on the landfill. Those flows increase during periods of heavy rainfall in the Valley, and the problem is compounded by releases of water into the river by the Salt River Project, which operates dams north of the landfill.

HAS ANYTHING BEEN DONE ABOUT THE PROBLEM?

Early in 1992, increased flows in the Salt River caused debris believed to have come from the landfill to be released into the river. At that time, the U.S. Army Corps of Engineers (COE) worked with the tribe to temporarily stabilize the banks and protect the landfill from future flooding.

In May, COE determined that the landfill had violated the federal Clean Water Act by discharging pollutants into the Salt River, which under federal law falls under the protective umbrella of "waters of the United States."

In spring, COE and the tribe reached agreement on specific steps needed to address the violations. Those actions included completion of design work intended to protect the landfill, including rerouting the river; safeguards against predicted floods; protection of the landfill's banks; and other remedial actions.

The landfill also was in violation of federal regulations that prohibit siting a landfill in a floodplain, which allows solid waste to wash away and pose a threat to people, wildlife, land and water.

The old landfill site was scheduled for closure in October 1993. A new site, which would not be located in a floodplain and which would be designed to meet new federal regulations, was scheduled to be built. The final design plan for the landfill, due August 30, 1992, has not been received from the tribe. — WHAT DESIGN PLAN AND SUBMITTED TO WHO

WHEN DID WATER FLOWS BEGIN TO WASH AWAY PORTIONS OF THE LANDFILL?

Serious erosion of the landfill began Friday morning, January 8, 1993, when Salt River Project increased flows to 124,000 cubic feet per second (cfs). ADEQ engineers estimated the landfill was losing anywhere from five feet to 30 feet of its contents each hour into the river.

Trash also was visible in the river, presumably a combination of municipal solid waste and discarded construction materials from the perimeter of the landfill impacted by the river flow, windblown litter from the landfill and trash from upstream wildcat dumping.

By Monday, January 11, engineers estimated that a total of 139,000 cubic yards of the landfill - or an estimated 75 x 1,000 x 50 feet - had been washed down the river.

Releases may have contained a combination of municipal solid waste, construction debris, household hazardous waste, industrial and medical waste.

WHAT IS THE ROLE OF THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY IN REMEDYING PROBLEMS AT THE LANDFILL?

ADEQ does not have jurisdiction over the landfill. However, ADEQ Director Ed Fox, as well as technical specialists in ADEQ's Waste and Water Quality Programs, have been working with federal agencies over the past year to encourage enforcement.

When heavy rains began in early January, ADEQ mobilized inspection teams as the landfill began to pose an immediate threat to public health and the environment. These teams have been monitoring the integrity of the Tri-City Landfill and other landfills along the Salt River that may be impacted, characterizing the nature of the debris left along river banks, and sampling the river's flow as well as stagnant pools of water deposited in the wake of the flooding. ADEQ's Emergency Response division also is assisting.

WHAT ARE THE HEALTH CONCERNS POSED BY FLOODING AT THE LANDFILL?

Possible contamination of groundwater near the landfill poses the greatest health concern. With rising water levels, fill at the site has become saturated, creating new leachate, liquid that picks up contaminants as it trickles through wastes into the ground. This leachate could further contaminate the groundwater table under the landfill, which already contains low levels of solvents, including trichloroethylene (TCE).

Although that groundwater doesn't serve any drinking water systems at this time, it is moving in a southeasterly direction toward the Mesa area.

ADEQ also is monitoring several smaller landfills near the Salt River that could be flooded and create a threat to groundwater. Those include the old 19th Avenue and Estes landfills in south Phoenix, both of which have been closed and are federal Superfund cleanup sites; and landfills in El Mirage and Avondale, which are on the Agua Fria River near its convergence with the Salt.

Waste washed into the river also creates a threat of contamination downstream. Landfill waste from the Tri-City Landfill that now litters the Salt River may include hazardous household waste like cleaners and aerosols, medical waste, industrial waste and rotting garbage.

But although those substances are potentially hazardous, their health impact downstream has been greatly diluted by the river's heavy water flows. While debris along the river is an eyesore and may cause bad odors, those problems should not pose a serious threat to public health.

Recent history in the United States has shown that even catastrophic floods that wash out whole landfills and sewage treatment systems are not associated with epidemics of infectious disease. Also, the problem is mitigated by the fact that recreational areas on the Salt River lie north of the landfill, and people have little direct contact with the river to the south.

One of the most common problems associated with flooding is the breeding of disease vectors such as flies and mosquitoes. Vector control isn't likely to be a problem at this time of the year because of the cooler weather.

Coordinating with ADEQ, the Arizona Department of Health Services Vector Control Section is surveying standing water along the river banks and will watch for evidence of insect breeding in the future.

WHAT HAS ADEQ DONE TO TRY TO REMEDY THE PROBLEM UNTIL THE LANDFILL CLOSES?

ADEQ Director Edward Fox has called for correction of the violations, development of a closure plan and selection of a new landfill site outside the 100-year floodplain. A letter to COE and EPA Jan. 7 included the following statement:

"This environmental threat is at least 10 years old and further delay cannot be accepted. As Director of the Arizona Department of Environmental Quality, I am obligated at this time to

explore the state's legal options to expedite actions to bring the Tri-City Landfill into compliance."

ADEQ also is coordinating with EPA, COE and the state Division of Emergency Services to seek Federal Disaster Funds and bring about cleanup of the river. The agency also is calling on the Salt River Pima-Maricopa Indian Community and the cities that use the landfill to help pay for cleanup and to stop delivery of waste to the site.

Information is available at the following numbers:

Arizona Department of Environmental Quality: John D. Godec, (602) 207-2215 or (800) 234-5677, ext. 2215

U.S. Army Corps of Engineers: R.J. Armogeda, (213) 894-5320

U.S. Environmental Protection Agency: Jim Vreeland, (415) 744-2099

You can receive information about activities of the Arizona Department of Environmental Quality at the following telephone numbers:

Automated Information Line: (602) 207-4300
General Information: (602) 207-2300
Arizona Toll-Free: (800) 234-5677

The Arizona Department of Environmental Quality shall preserve, protect and enhance the environment and the public health and shall be a leader in the development of public policy to maintain and improve the quality of Arizona's air, land and water resources.